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## NOTICE OF ALLOWANCE AND FEE(S) DUE

60601

7590

12/02/2009

Muncy, Geissler, Olds & Lowe, PLLC P.O. BOX 1364 FAIRFAX, VA 22038-1364 EXAMINER

STULTZ, JESSICA T

ART UNIT PAPER NUMBER

2873 DATE MAILED: 12/02/2009

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/665,530      | 09/22/2003  | John S. Harchanko    | MEMS-0178-US        | 5923             |

TITLE OF INVENTION: OPTICAL ELEMENT/DEVICE MOUNTING PROCESS AND APPARATUS

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | YES          | \$755         | \$300               | \$0                  | \$1055           | 03/02/2010 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

| appropriate. All further<br>indicated unless correcte<br>maintenance fee notificat                              | ed below or directed oth   | ig the Patent, advance or<br>nerwise in Block 1, by (a  | rders and notification of n<br>a) specifying a new corres  | naintenance fees wi<br>spondence address;   | ill be<br>and/or                     | mailed to the current (b) indicating a sepa   | correspondent<br>rate "FEE AD                                    | e address as<br>DRESS" for                                    |
|---|--|---|--|---|--------------------------------------|---|--|---|
| CURRENT CORRESPONDI   | Fee(   | (s) Transmittal. This   | certif   | can only be used for<br>icate cannot be used for<br>such as an assignme<br>lling or transmission. | or any other ac                      | ccompanying   |  |   |
| Muncy, Geissle<br>P.O. BOX 1364<br>FAIRFAX, VA  | 7590 12/02<br>er, Olds & Lowe, l<br>22038-1364   |   | I he   | Cert  | ificate                              | of Mailing or Trans;<br>s) Transmittal is being<br>ficient postage for firs<br>ISSUE FEE address<br>1) 273-2885, on the d | nission<br>deposited wit   | th the United   |
|   |  |   |  |   |                                      |   | (D   | epositor's name)  |
|   |  |   | <u> </u>   |   |                                      |   |  | (Signature)   |
|   |  |   |  |   |                                      |   |  | (Date)  |
| APPLICATION NO.   | FILING DATE  |   | FIRST NAMED INVENTOR   | NTOR ATTORNEY DOCKET  |                                      | RNEY DOCKET NO.   | NO. CONFIRMATION NO.   |   |
| 10/665,530<br>FITLE OF INVENTION  | 09/22/2003<br>: OPTICAL ELEMENT/   | DEVICE MOUNTING F   | John S. Harchanko<br>PROCESS AND APPARA  | TUS   | 171                                  | EMS-0178-US   | 592  | 3   |
| APPLN. TYPE   | SMALL ENTITY   | ISSUE FEE DUE   | PUBLICATION FEE DUE  | PREV. PAID ISSUE  | FEE                                  | TOTAL FEE(S) DUE  | DATE   | E DUE   |
| nonprovisional  | YES  | \$755   | \$300  | \$0   |                                      | \$1055  | 03/02  | 2/2010  |
| EXAM  | INER   | ART UNIT  | CLASS-SUBCLASS   | ASS-SUBCLASS  |                                      |   |  |   |
| STULTZ, J   | ESSICA T   | 2873  | 359-819000   |   |                                      |   |  |   |
| "Fee Address" indi<br>PTO/SB/47; Rev 03-0<br>Number is required.  3. ASSIGNEE NAME A<br>PLEASE NOTE: Unl        | ND RESIDENCE DATA<br>less an assignee is identi<br>h in 37 CFR 3.11. Comp                              | 'Indication form<br>ed. Use of a Customer<br>A TO BE PRINTED ON Tified below, no assignee                 | (1) the names of up to or agents OR, alternative (2) the name of a single registered attorney or a 2 registered patent attoristed, no name will be THE PATENT (print or type data will appear on the part a substitute for filing and (B) RESIDENCE: (CITY)  | e firm (having as a agent) and the name rneys or agents. If n printed.                            | membs of use on am                   | er a 2p to lee is 3lentified below, the de  | ocument has b  | been filed for  |
|   |  |   | rinted on the patent):   |   |                                      |   |  |   |
| 4a. The following fee(s) a  Issue Fee  Publication Fee (N  Advance Order - #                                    | To small entity discount p   |   | 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)  ☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form). |   |                                      |   |  |   |
| a. Applicant claims   | <b>tus</b> (from status indicated<br>s SMALL ENTITY statu  | is. See 37 CFR 1.27.  | ☐ b. Applicant is no long  | ger claiming SMAL   | L EN                                 | ΓΙΤΥ status. See 37 CI  | FR 1.27(g)(2).   |   |
| NOTE: The Issue Fee and nterest as shown by the r   | d Publication Fee (if requeecords of the United Sta  | uired) will not be accepted<br>tes Patent and Trademark   | d from anyone other than the Office.   | he applicant; a regis   | tered :                              | attorney or agent; or th  | e assignee or o  | other party in  |
| Authorized Signature  |  |   |  | Date  |                                      |   |  |   |
| Typed or printed name   |  |   |  | =   |                                      |   |  |   |
| This collection of inform<br>an application. Confident<br>submitting the completed<br>this form and/or suggests | ation is required by 37 C tiality is governed by 35 d application form to the long first page 1450. DO | FR 1.311. The informatic<br>U.S.C. 122 and 37 CFR<br>USPTO. Time will vary<br>rden, should be sent to the | on is required to obtain or r<br>1.14. This collection is est<br>depending upon the indive<br>e Chief Information Office<br>COMMERTED DEADMERT   | retain a benefit by the imated to take 12 m ridual case. Any corer, U.S. Patent and This ADDRESS  | e publ<br>ninutes<br>nment<br>Fraden | ic which is to file (and<br>to complete, including<br>on the amount of time<br>ark Office, U.S. Department                | by the USPTO<br>g gathering, pone you require<br>furtment of Con | O to process)<br>reparing, and<br>to complete<br>nmerce, P.O. |

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| APPLICATION NO.        | FILING DATE           | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.      | CONFIRMATION NO. |  |  |
|------------------------|-----------------------|----------------------|--------------------------|------------------|--|--|
| 10/665,530             | 09/22/2003            | John S. Harchanko    | MEMS-0178-US             | 5923             |  |  |
| 60601 75               | 60601 7590 12/02/2009 |                      |                          | EXAMINER         |  |  |
| Muncy, Geissler,       | Olds & Lowe, PLLO     |                      | STULTZ, JESSICA T        |                  |  |  |
| P.O. BOX 1364          | 000 1051              |                      | ART UNIT                 | PAPER NUMBER     |  |  |
| FAIRFAX, VA 22038-1364 |                       |                      | 2873                     |                  |  |  |
|                        |                       |                      | DATE MAIL ED: 12/02/2009 |                  |  |  |

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 432 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 432 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

|   | Application No.   | Applicant(s)  |  |
|---|---|---|--|
|   | 10/665,530  | HARCHANKO, JOHN S.  |  |
| Notice of Allowability  | Examiner  | Art Unit  |  |
|   | JESSICA T. STULTZ   | 2873  |  |
|   | JESSICA 1. STULTZ   | 2073  |  |
| The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED in or other appropriate commures (RIGHTS). This application is su | this application. If not included<br>nication will be mailed in due course. <b>THIS</b> |  |
| 1. $\boxtimes$ This communication is responsive to $\underline{\textit{Supplemental Amend}}$  | <u>dment filed August 7, 2009 an</u>  | d BPAI decision of March 27, 2009.  |  |
| 2. ☑ The allowed claim(s) is/are <u>16-21, 23-27</u> .  |   |   |  |
| <ul> <li>3. ☐ Acknowledgment is made of a claim for foreign priority u</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> <li>1. ☐ Certified copies of the priority documents have</li> </ul>  | e been received.  |   |  |
| 2. Certified copies of the priority documents have  |   |   |  |
| 3. Copies of the certified copies of the priority do  | ocuments have been received   | in this national stage application from the   |  |
| International Bureau (PCT Rule 17.2(a)).  |   |   |  |
| * Certified copies not received:  |   |   |  |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.   |   | a reply complying with the requirements   |  |
| 4. A SUBSTITUTE OATH OR DECLARATION must be subm<br>INFORMAL PATENT APPLICATION (PTO-152) which giv   |   |   |  |
| 5. CORRECTED DRAWINGS ( as "replacement sheets") mu   | st be submitted.  |   |  |
| (a) ☐ including changes required by the Notice of Draftsper   | son's Patent Drawing Review   | ( PTO-948) attached   |  |
| 1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date  | _•  |   |  |
| <ul><li>(b) ☐ including changes required by the attached Examiner</li><li>Paper No./Mail Date</li></ul>   | 's Amendment / Comment or i   | n the Office action of  |  |
| Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in  |   |   |  |
| 6. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT  |   |   |  |
|   |   |   |  |
| Attachment(s)   | E   Notice of Infe  | armal Datant Application  |  |
| <ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>   | 6. ☐ Interview Su   | ormal Patent Application  |  |
| •   | Paper No./N   | lail Date   |  |
| 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date   | 7. ∐ Examiner's A   | mendment/Comment  |  |
| 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material  |   | statement of Reasons for Allowance  |  |
|   | 9.  |   |  |
| /Jessica T Stultz/  |   |   |  |
| Primary Examiner, Art Unit 2873   |   |   |  |
|   |   |   |  |

Art Unit: 2873

Allowed Claims: 16-21, 23-27

## Reasons for Allowance

The following is an examiner's statement of reasons for allowance: none of the prior art alone or in combination disclose or teach of the claimed combination of limitations to warrant a rejection under 35 USC 102 or 103.

Specifically regarding independent claim 18, none of the prior art alone or in combination disclose or teach of a multi-optical element device comprising: a mounting system formed by etching substrate(s) to form a recess to receive a reference optical element, where said recess at least partially conforms to the shape of said reference optical element, said mounting system contains etched substrate(s) forming etched structures upon which optical devices can be attached; and at least a first optical element attached to a predetermined structure of said etched structures, as claimed, specifically wherein said etched structure is covered with a filling compound to change the index of refraction.

Specifically regarding independent claim 27, none of the prior art alone or in combination disclose or teach of a multi-optical element device comprising: a mounting system formed by etching substrate(s) to form a recess to receive a reference optical element, where said recess at least partially conforms to the shape of said reference optical element, said mounting system contains etched substrate(s) forming etched structures upon which optical devices can be attached; and at least a first optical element attached to a predetermined structure of said etched structures, as claimed, specifically wherein said etched structure forms a cavity and wherein said reference optical element is located inside said cavity and the filling compound is used to fill said cavity.

### Conclusion

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA T. STULTZ whose telephone number is (571)272-2339. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jessica T Stultz Primary Examiner Art Unit 2873 Application/Control Number: 10/665,530

Page 4

Art Unit: 2873

Primary Examiner, Art Unit 2873